

SPECIFICATION AMENDMENTS

Please amend the specification as follows:

Substitute paragraph [0006] on page 4, with the following:

[0006] ~~Figures 1a and 1b show~~ Figure 1 shows a display screen featuring an outline of an automobile ~~respectively before and after a limousine stretching.~~

Substitute paragraph [0032] on page 10, with the following:

[0032] Figure 1 shows a profile image of an automobile 102 before a limousine stretch and a profile image of an automobile 104 after a limousine stretch. Automobile 102 has a limousine point on an axis to which a limousine line is drawn as a normal so as to extend to both automobiles ~~102-104~~ 102 and 104. The area under the limousine line of automobile 102 is stretched by a distance labeled as ~~"limousine stretch"~~ "limousine distance" on automobile 104. As such, automobile 104 appears to be limousine version of automobile 102.

Substitute paragraph [0034] on page 11, with the following:

[0034] A limousine point on original screen 200a is marked at the limousine point (Limousine,0). A limousine line 202a is drawn normal to the x axis of the original screen 200a on which limousine point (Limousine,0) is situated. The limousine point (Limousine,0) is to the right of the left edge of original screen 200a by a distance of represented as "Limousine Distance" in Figure 2a. Three (3) graphical data objects 204a, 206a, 208a are seen on original screen 200a. Object 204a is to the left of limousine line ~~206a~~ 202a, object 206a straddles limousine line 202a, and object 208a is to the right of limousine line 202a. Object 206a has a width W_1 and a height H_1 . The top edge of object 206a is below the top of original screen 200a by a distance of T_1 . The left edge of object 206a is to the right of the left edge of original screen 200a by a distance of L_1 .

Substitute paragraph [0036] beginning on page 11, with the following:

[0036] An original screen 300a in Figure 3a is identical to the original screen 200a in Figure 2a, although additional reference numerals and other references have been added. An ~~original-target~~ screen 300b in Figure 3b is identical to the ~~original-target~~ screen 200b in Figure 2b, although additional reference numerals and other references have been added. The upper left corner of each of object 204a, 206a, and 208a is, respectively, (X_{204}, Y_{204}) , (X_{206}, Y_{206}) , (X_{208}, Y_{208}) . The width and height of each of object 204a, 206a, and 208a is, respectively, W_{204} and H_{204} , W_{206} and H_{206} , and W_{208} and H_{208} . Limousine line 202a is a distance of A1 from the left edge of original screen 300a and a distance of A2 from the right edge of original screen ~~300a~~ 300a.

Substitute paragraph [0037] on page 12, with the following:

[0037] An original ~~A target~~ screen 300b in Figure 3b is identical to the original ~~target~~ screen 200b in Figure 2b, although additional reference numerals and other references have been added. The respective area under limousine line 202a in Figs 2a and ~~3b-3a~~ has been stretched as shown in Figures 2b and 3b to create two lines, one being a distance of B1 from the left edge of target screen 300b, and the other being a distance of B2 from the right edge of target screen 300b. A factor 'f' is used to transform original screen 200a-300a to target screen 200b-300b, where $f = B1/A1=B2/A2$. As such, the upper left corner of each of object 204b, 206b, and 208b is, respectively, $(X_{204} * f, Y_{204} * f)$, $(X_{206} * f, Y_{206} * f)$, $(X_{208} * f+C, Y_{208} * f)$, and the width and height of each of object 204b, 206b, and 208b is, respectively, $W_{204} * f$ and $H_{204} * f$, $W_{206} * f+C$ and $H_{206} * f$, and $W_{208} * f$ and $H_{208} * f$. Preferably, the smallest change between height and width, from the original to the target screen, will be used for the 'f' factor. By way of example, if SH_1 and SW_1 were both 10 units and SH_2 and SW_2 were 20 units and 50 units, then a re-sizing 'f' factor of '2' would be used in the transformation of the original screen of Figures 2a and 3a into the target screen of Figures 2b and 3b.

Substitute paragraph [0044] on page 15, with the following:

[0044] Process 500 then moves control to block 522. At block 522, a query determines, by a height comparison of $T_1 < \text{Limo}$, if the top most edge of the original object is above the ~~limousine-point~~ line. If so, then another query is made at block 524 to determine, by a height comparison of $T_1 + H_1 < \text{Limo}$, if the bottom most edge of the original object is to above the ~~limousine-point~~ line. If so, then it is determined that the original object does not need to be adjusted because the original object is on the top side of the original screen. Process 500 then is complete with this aspect of the transformation of the original object of the original screen to the target object of the target screen.

Substitute paragraph [0052] on page 20, with the following:

[0052] Figure 7 depicts a main television guide or electronic programming guide (EPG) screen having an original design resolution of 576 pixels by 480 pixels. The dashed line in ~~Figure 7-702~~ depicts a limousine line that is designed by a screen designer that can be used for limousine scaling. The limousine line extends as a normal to a limousine point at the bottom edge of screen to intersect with a horizontal axis on the top edge of the screen.

Substitute paragraph [0053] beginning on page 20, with the following:

[0053] Figure 8a depicts an EPG screen 800a that has been limousine scaled to a dimension of 576 pixels by 360 pixels, where objects have been scaled by a factor of 75% and the target screen height has been reduced to 75% of the height of the original screen. Figure 8a shows interactive on-screen buttons for a "Video Store" function, a "Search" function, and an "Exit to TV" function. These buttons are seen on the left side of the screen and have the same proportions in the target screen as they do in the original screen so that their appearance on the target screen does not have a distorted appearance. The space on the target screen is used effectively by making the program listing section in the EPG on the right side of the target screen proportionally wider than on the original screen. This technique allows long titles, such as "Moment of Truth: Why My Daughter?", to be displayed without clipping.

Substitute paragraph [0055] on page 21, with the following:

[0055] Figure 8b depicts the EPG screen of Figure 7 having been scaled non-proportionally to a dimension of 576 pixels by 360 pixels, where space on the screen has not been used as effectively as the space used in the limousine scaled screen depicted in Figure 8a. The on-screen interactive buttons on the

left side of the original screen for a "Video Store" function, a "Search" function, and an "Exit to TV" function have an appearance of being too wide. These buttons would be more esthetically pleasing if they had been stretched proportionally rather than to be rendered non-proportionally. Alternatively, the grid on the right side of the original screen can be stretched non-proportionally without appearing distorted. As such, the space at the right side of the screen 800b in Figure 8b is not used as effectively as the space in the limousine scaled target screen depicted in Figure 8a. Unlike in Figure 8a, the text "Moment of Truth: Why My Daughter?" is truncated in Figure 8b.

Substitute paragraph [0056] beginning on page 21, with the following:

[0056] Figure 9 depicts an EPG screen 900 having been scaled proportionally to a resolution of 432 pixels x 360 pixels. For this EPG screen, limousine scaling is not needed because the target screen has the same proportions as the original screen and thus does not have a distorted appearance.

Substitute paragraph [0057] on page 22, with the following:

[0057] Figure 10a depicts a screen 1000a having a dimension of 576 pixels by 360 pixels that has not been subjected to limousine stretching. Graphical data objects at the left side of the screen in the depicted scaled version look stretched and have a distorted appearance of being too wide. Figure 10b depicts a screen 1000b, for comparison purposes, which is the screen of Figure 10a as having a dimension of 432 pixels by 360 pixels, which is a proportionally scaled screen that has not been subjected to non-proportional limousine stretching.

Substitute paragraph [0058] on page 22, with the following:

[0058] Figure 11 depicts a screen 1100 having a dimension of 576 pixels by 360 pixels, where non-proportional limousine scaling has been used. Most of the graphical elements on the original screen have been stretched toward the right side of the target screen as depicted in Figure 11. Limousine scaling is beneficial here in that the 'Video Store' button does not have a distorted appearance.

Substitute paragraph [0059] on page 22, with the following:

[0059] Figure 12 depicts a screen 1200 having a dimension of 576 pixels by 360 pixels, where non-proportional limousine scaling has been used. The result is that the on-screen graphical data objects do not have distorted or misshapen appearances.

Substitute paragraph [0060] on page 22, with the following:

[0060] Figure 13 depicts a screen 1300 having a dimension of 576, pixels by 360 pixels, where non-proportional limousine scaling has been used. Limousine scaling has stretched most of the graphical elements toward the right side of the target screen.

Substitute paragraph [0063] on page 23, with the following:

[0063] Figure 14 illustrates an exemplary environment 1400 in which a viewer may receive content via a client that re-sizes the content to fit on a target screen as has been described above. Exemplary environment 1400 is a television entertainment system that facilitates distribution of content to multiple viewers. The environment 1400 includes one or more content providers 1402, one or more program data providers 1404, a content distribution system 1406, and multiple clients 1408(1), 1408(2), ..., 1408(J) coupled to the content distribution system 1406 via a broadcast network 1410. Each client 1408 (1 through J) and the content distribution system 1406 are in communication with a network 1450 that provides two-way communications there between. The system may have two-way communications, but this is not required for the UI page scaling to work. The content distribution system 1406 services requests from the clients 1408(1)-1408(J). Each client ~~1408(j)~~1408(J) can receive an original screen that has been designed for limousine stretching and can perform limousine stretching and integer rounding to output a display of a target screen, as has been described above.

Substitute paragraph [0072] beginning on page 26, with the following:

[0072] Each client 1408 runs one or more applications. As mentioned above, one such application can enable client ~~1408(j)~~1408(J) to receive an original screen that has been designed for limousine stretching and can enable limousine stretching and integer rounding operations so as to output a display of a target screen, as has been described. Another application may enable a television viewer to navigate through an onscreen program guide, locate television shows of interest to the viewer, and purchase items, view linear programming as well as pay per view and/or video on demand programming. As such, one or more of the program data providers 1404 can include stored on-demand content, such as Video On Demand (VOD) movie content, and near VOD such as pay per view movie content. The stored on-demand and near on-demand content can be viewed with a client 1408. Each client 1408 receives content and adapts the content for output to a target screen that is displayed on the television 1436. This adaptation process undertaken by the client 1408 includes the limousine stretching and integer rounding techniques as disclosed in this patent.